

Fact Sheet



For Final Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on July 24, 2017.

Permit Number: **R30-07700017-2017**

Application Received: **January 15, 2020**

Plant Identification Number: **077-00017**

Permittee: **Columbia Gas Transmission, LLC**

Facility Name: **Terra Alta Compressor Station**

Mailing Address: **1700 MacCorkle Avenue, SE, Charleston, WV 25314**

Permit Action Number: *SM02* Revised: *June 15, 2020*

Physical Location: Terra Alta, Preston County, West Virginia
UTM Coordinates: 625.13 km Easting • 4364.38 km Northing • Zone 17
Directions: From I-79 take State Route 7 east to Terra Alta. Traveling east on State Route 7 to the town of Terra Alta, turn right onto Secondary Route 53. Proceed approximately 2 miles to the station which is located on the right.

Facility Description

Terra Alta Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of six (6) heaters, five (5) 1100-hp and one (1) 174-hp natural gas fired reciprocating engines, one (1) 530-hp emergency engine/generator, one (1) 3.57 mmBtu/hr heating system boiler, one (1) 0.5 MMBtu/hr odorant flare, and one (1) 250 gallon mercaptan odorant storage tank

This modification is for the addition of three (3) line heaters permitted under R13-3431A.

Emissions Summary

This modification results in the following emission changes:

Pollutant	Increase in Potential Emissions (TPY)
NO _x	12.02
CO	10.10
VOCs	0.66
PM/PM ₁₀ /PM _{2.5}	0.91
SO ₂	0.09
Formaldehyde	<0.01
Total HAPs	0.23

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 399.81 TPY of NO_x and 11.25 TPY of Formaldehyde. Due to this facility's potential to emit over 100 tons per year of criteria pollutant and over 10 tons per year of a single HAP, Columbia Gas Transmission, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	PM limits for Indirect Heat Exchangers
	45CSR10	Emissions of sulfur oxides
	45CSR13	NSR permitting
	45CSR16	New stationary sources
	45CSR30	Operating permit requirement.
	45CSR34	Emission standards for HAPs
	40CFR60, Subpart Dc	Steam generating units
	40CFR63, Subpart DDDDD	NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

The active permits/consent orders affected by this modification are as follows:

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-3431A	4/7/2020	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

45CSR2: Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers

All three heaters to be installed, (HTR7, HTR8, and HTR9), are subject to the 10 percent opacity limitation of 45CSR§2-3.1.

HTR7, having a heat input under 10 MMBtu/hr, is exempt from sections 4, 5, 6, 8, and 9 of 45CSR2, as specified in 45CSR§2-11.1.

According to 45CSR§2-4.1.b, the particulate matter (PM) weight limitation was calculated to be 0.09×10 MMBtu/hr = 0.9 lbs PM/hr each for HTR8 and for HTR9. The particulate matter emission limit for HTR8 and HTR9 in condition 4.1.12 is 0.07 lb/hr each. This is less than the weight standard of this rule, therefore compliance with the particulate matter emission limit in condition 4.1.12 will demonstrate compliance with the limit of 45CSR§2-4.1.b.

According to 45CSR§2-8.4.b, the owner or operator of a fuel burning unit(s) which combusts only natural gas shall be exempt from the periodic testing requirements of 45CSR§2-8.1.a and the monitoring requirements of 45CSR§2-8.2.

45CSR10: To Prevent and Control Air Pollution from the Emission of Sulfur Oxides

According to 45CSR§10-3.3.f, the SO₂ weight emission standard for HTR8 and HTR9 was calculated to be 3.2×10 MMBtu/hr = 32 lbs SO₂/hr each. The SO₂ hourly emission limit in condition 4.1.12 for HTR8 and HTR9 is 0.57 lbs SO₂/hr each. This is less than the weight standard of this rule, therefore compliance with the SO₂ emission limit in condition 4.1.12 will demonstrate compliance with the limit of 45CSR§10-3.3.f. Also, according to 45CSR§10-10.3, fuel burning units which combust natural gas are exempt from the monitoring requirements of 45CSR§10-8.

HTR7, having a heat input under 10 MMBtu/hr, is exempt from sections 3, 6, 7, and 8 of 45CSR10, as specified in 45CSR§10-10.1.

40CFR60, Subpart Dc: Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

HTR7 has a maximum design heat input capacity less than 10 MMBtu/hr, which is below the applicability criteria stated in 40CFR§60.40c(a). However, HTR8 and HTR9, which are rated at 10 MMBtu/hr, are subject to this subpart. This subpart requires process heaters that burn only natural gas to submit an initial

notification and record fuel use. There are no standards for natural gas fired units, so performance testing is not required.

40CFR63, Subpart DDDDD: National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters

The heaters (HTR7, HTR8 and HTR9) are subject to initial notification and tune-ups. Biennial tune-ups are required for HTR7 because it has a heat input capacity greater than 5 mm Btu/hr but less than 10 mmBtu/hr. HTR8 and HTR9 are required to have annual tune-ups because they have a heat input capacity of 10 mmBtu/hr or greater. The one-time energy assessment is not required for HTR7, HTR8, and HTR9 because these heaters are new.

The heaters (HTR7, HTR8 and HTR9) are units designed to burn gas 1 fuel and there are no applicable standards in this subpart for which compliance must be demonstrated through stack testing.

Revisions to Existing Permit Conditions

Citations in the following permit conditions were revised to include new permit conditions in R13-3431A:

Existing Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3431A Condition
4.1.1.	10% Opacity Limit	45CSR§2-3.1.	5.1.2.
4.1.2.	Visible Emissions: Method 9 or COMS	45CSR§2-3.2.	5.1.2. and 5.3.1.
4.1.3.	Boiler Work Practice Standards	45CSR34, 40 CFR§§63.7500(a)(1) and (3), Table 3	5.4.2.
4.1.7. (new 4.1.8.)	Tune-up Requirements	45CSR34; 40 CFR§63.7540(a)(10)	5.4.1.
4.1.9. (new 4.1.10.)	Tune-up Requirements	45CSR34; 40 CFR§63.7540(a)(11)	5.4.1

New Permit Conditions

The following new permit conditions were added with this modification:

New Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3431A Condition
4.1.6.	Tune-up Requirements	45CSR34; 40 CFR§63.7500(a) and Table 3, Item 3	N/A
4.1.7.b.	Initial compliance with the work practice standards for new affected sources	45CSR34; 40 CFR §63.7510(g)	N/A
4.1.11.	Maximum Design Heat Input	45CSR§13-5.10	5.1.1.
4.1.12.	Emission and Natural Gas Usage Limits	45CSR§13-5.10; 45CSR§2-4.1.b and 45CSR§10-3.3.f	5.1.3.
4.1.13.	Comply with 40CFR60, Subpart Dc	45CSR§13-5.10	5.1.4.

New Title V Permit Condition	Summary of Permit Condition	Regulatory Citation	R13-3431A Condition
4.2.2.	Monitor and Record Daily Natural Gas Consumption	45CSR16; 45 CSR §2-8.3.c., and 40 CFR §60.48c(g)(1)	5.2.1.
4.4.3.	Natural Gas Consumption Records	45CSR§13-5.10	5.5.2.
4.5.5.	Initial Notification	45CSR16; 40CFR§60.48c(a)	5.5.1.
4.5.6.	Recordkeeping and Reporting in Accordance with 60.48c	45CSR§13-5.10	5.5.3.

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

None

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: April 28, 2020

Ending Date: May 28, 2020

Point of Contact

All written comments should be addressed to the following individual and office:

Rex Compston, P.E.
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 41252 • Fax: 304/926-0478
Rex.E.Compston@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.